IN THE SPECIFICATION

Page 1, line 1 insert -- This application is a continuation of application serial number 09/828,337 filed on April 5, 2001 to the same inventors.--

Page 41, line 2, amend the paragraph as follows:

The CPU 206 directs a series of wavelength converters 262 located after the delay loop 232 in channels 1, 2 and 3 to change the wavelengths 1, 2 and 3 into wavelengths A, B and C respectively. The input light into the wavelength converters 262 serves as a gate signal to a SOA element [264]. The SOA element [264] is positioned on one side of a Mach-Zehnder interferometer [266] well known in the art. An integrated laser source [268] is coupled to the second leg of the interferometer [266]. When the light signal is gating the [this] SOA element [264], it causes a refractive change in the SOA crystal that alters the phase of the integrated laser source [268] coupled to one leg of the Mach-Zehnder interferometer [266]. When this occurs, the laser light will exit the wavelength converter 262 which is termed as the ON or light state. When the phase is returned to normal with the absence of the input light, no light will exit the wavelength converter 262. This is termed as the OFF or dark state. The converter 262 has the ability to clone the input light and perform restoration functions based on the input filtering and SOA operating conditions as known in the art. In additional to cloning the input light signal, the wavelength converter 262 can change the input signal to a different wavelength typically within 4 nsec., a limitation set by the distributed feedback laser (not shown) used.

Page 42, line 16, amend the specification as follows:

The CPU 206 may therefore groom packets from any channel into any other channel and form many combinations of packet streams. The signals are amplified by the SOAs [264] once

per pass through the buffer loop 236. The saturated SOAs [264] in this configuration provide two regeneration functions, reamplification and reshaping, in this example. Of course, the retiming function may also be performed by the saturated SOAs [264] with additional hardware. The buffer loop 260 with grooming capabilities is made possible only by the optical serial code detectors 208 to instantaneously read packet IDs synchronized to the packet header while staying under the header time frame. The enhanced optical buffer 260 allows packet grooming to be performed at packet levels ahead of add-drop or cross-connect nodes. Improved bandwidth utilization, lower system costs and higher traffic routing efficiency are the result. The buffer 200 in FIG. 7 and buffer 260 in FIG. 8 may be matched to microsecond response cross-connect products such as the Lucent Lamda router or the Agilent bubble array. In this example only three wavelengths are used but it is to be understood that more wavelengths may be reserved for this function.